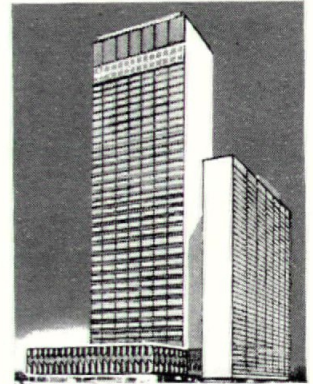
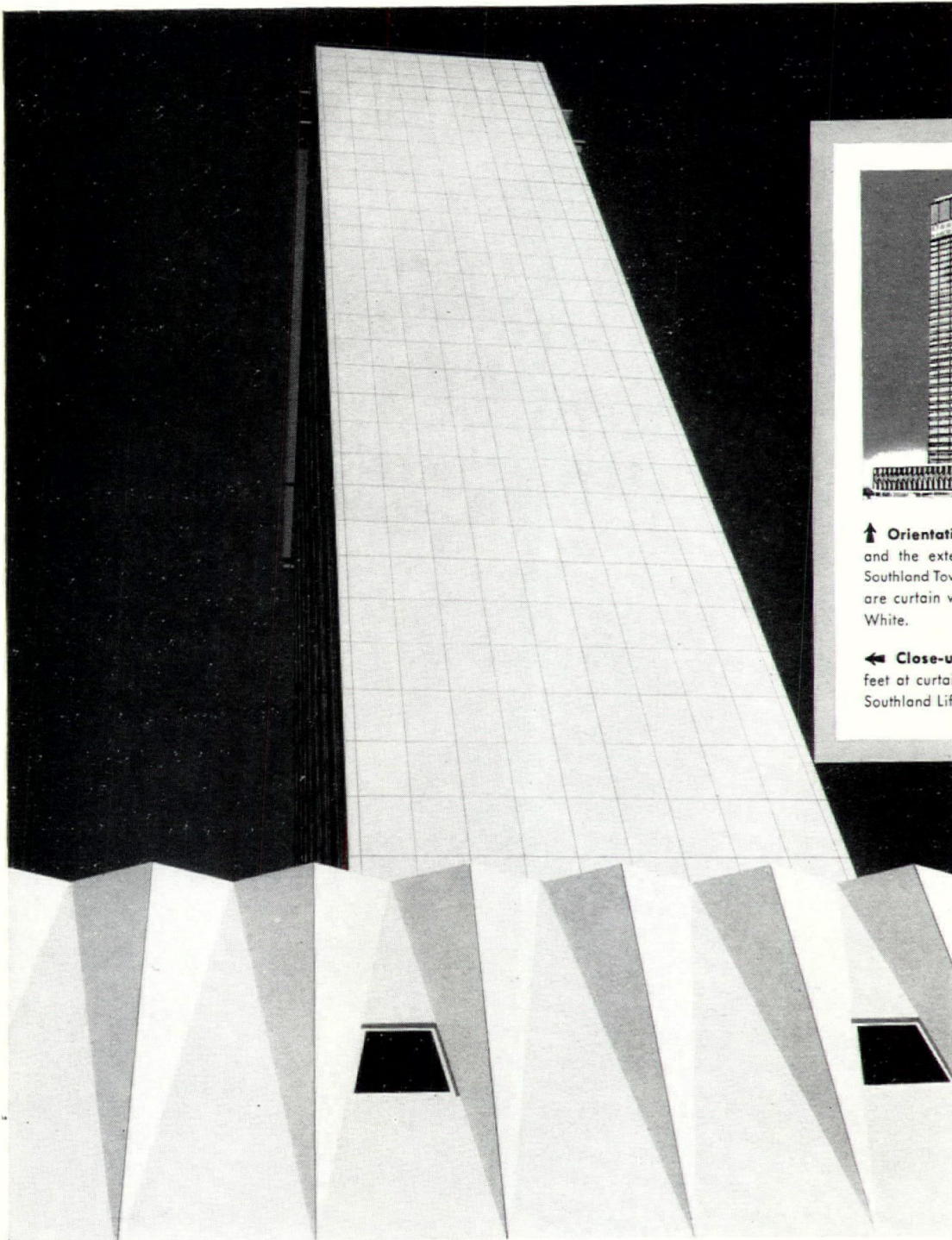




THE TEXAS ARCHITECT FOR AUGUST 1960

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↑ **Orientation View.** The podium and the exterior ends of both the Southland Tower and Sheraton-Dallas are curtain walls made with Trinity White.

← **Close-up.** Looking upward 550 feet at curtain wall on the 42-story Southland Life building.

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THE TEXAS ARCHITECT

Vol. 11

August, 1960

Number 6

Official Publication of THE TEXAS SOCIETY OF ARCHITECTS

The Texas Regional Organization of
The American Institute of Architects

Eugene George, Jr. Editor

John G. Flowers, Jr., Managing Editor

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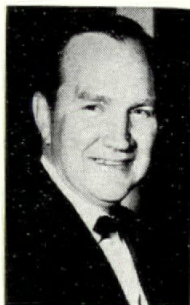
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OUR COVER

A Chinese pilgrim named Chou Ta-kuan in 1296 A. D. visited Angkor-Thom, the city of the Khmers. Describing portions of the ancient Cambodian city, he stated that "The center of the realm is marked by a tower of gold surrounded by more than twenty towers of stone and a hundred stone chambers." Chow surely saw, among the gilded carvings, the female deity, or "Devata" at nearby Angkor Wat. In Chou's footsteps some 650 years later traveled Texas architect Tom Shefelman with his observant wife Janice. The cover photograph of the Devata is an enlargement from a Kodachrome slide made during the Shefelmans' contemporary pilgrimage. Janice Jordan Shefelman describes this visit in "Towers in the Jungle."



The President's Letter

By

JACK CORGAN

President

Texas Society of Architects

I have just returned from El Paso where plans were finalized for the T.S.A. Convention in November. Convention Chairman Ed Carroll and his committees have done a splendid job in organizing and planning the events of the Convention.

In addition to the varied social events, especial efforts have been expended in planning the seminar program. The Convention theme, "Architecture for the Americas," is a response to the invitation to participate with the Mexican Architects in planning in the border areas. The invitation was extended on behalf of the Mexican Architects and with the blessings of the Mexican Government to the A.I.A. Convention in San Francisco. You will find it summarized in the June issue of the A.I.A. *Journal*. As we have gotten into the seminar planning it has become apparent that this promises to be one of the most important conventions T.S.A. has ever held. The subject matter is so exciting and broad that our only problem is to condense it into the limited time available.

This is both a challenge and an opportunity for the Architects in Texas. The values that can accrue from this Convention are great. It is the opportunity for Architects from Texas and the United States to provide the leadership in establishing areas of mutual interest and understanding with our neighbors south of the border. In my opinion, more good can come from this kind of meeting than all the 'striped pants' diplomacy in Washington.

We need the help of every architect in Texas to make this the best convention we've ever held. Make your plans to attend now.

Sincerely,

JACK CORGAN



Towers In The Jungle

*... a contemporary pilgrimage
to an exotic spot in Cambodia*

By JANICE JORDAN SHEFELMAN

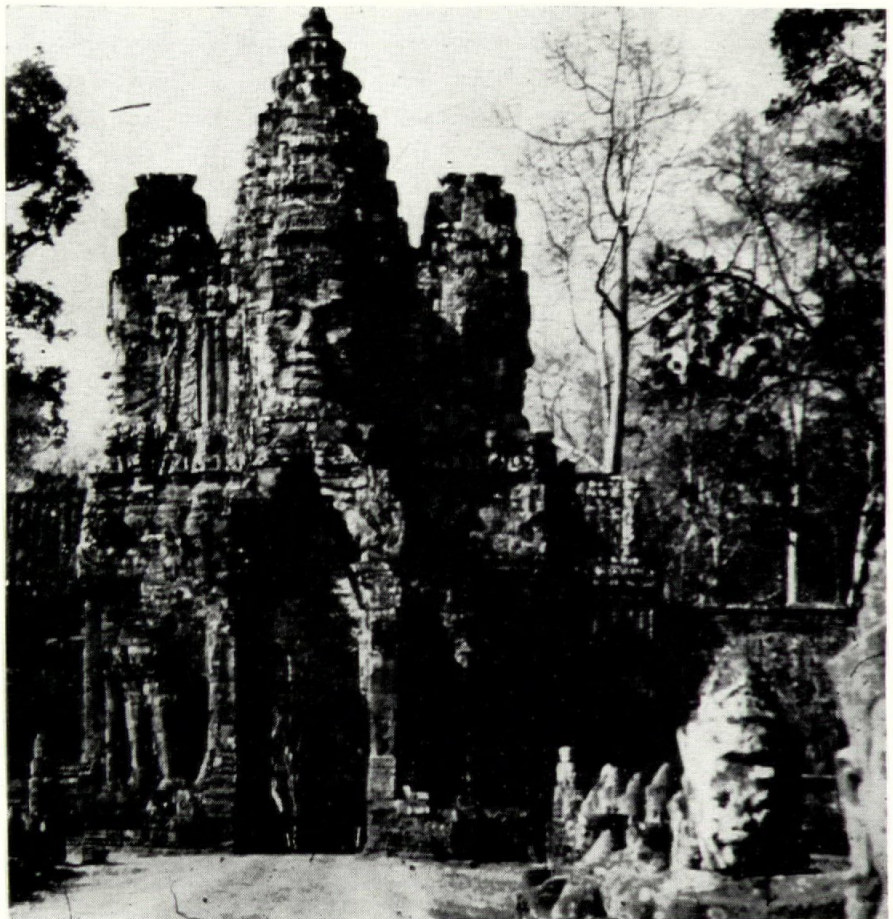
HIDDEN deep in the jungles of Cambodia is one of the greatest wonders of the world. There lie the ruins of Angkor, the once-glorious capital of the Khmer kingdom. From the ninth to the fifteenth century Angkor flourished, built towers embellished with gold and copper, exported Kingfisher plumes to China, fought wars with the Chams and Thais and then was deserted. The civilization was completely forgotten, and the magnificent palaces and temples were devoured by the jungle and inhabited by monkeys and bats.

In the seventeenth century two Spanish missionaries told of seeing great towers and ruins of a vanished city, but their report was ignored. Angkor remained lost to the world until 1860 when Henri Mouhot, a French naturalist, made the belated discovery. Benjamin Rowland describes that day in his book, *The Art and Architecture of India*; "stirred by natives' reports of empty cities lost in the jungle, (he) pushed

onward into the great forests of the Mekong River, until one burning tropic dawn, he looked upon the incredible spectacle of the towers of Angkor rising like some fantastic mirage of mountain peaks above the sea of jungle." Mouhot questioned some natives who were inhabiting the ruins, but they knew nothing of their glorious ancestors and

thought the temples were built by gods rather than by "the genius of this Michelangelo of the Orient who conceived such a work, who coordinated every part of it with the most wonderful art", as Mouhot praises the unknown architect of Angkor Wat (temple).

Almost a century later my husband and I journeyed to see those



Editor's Note: Photographs and sketches are by Texas architect Tom Shefelman whose wife, Janice, recounts their travels and visit in ancient Cambodia. The photographs are enlargements from Kodachrome slides.

same towers. By that time one no longer had to make his way through a dense jungle as Mouhot had done. Roads have been built although the jungle constantly threatens to overtake them again. There is a fine French hotel only a short ride by samlor from the ruined city. As we drove toward Angkor from the hotel, the jungle closed in our view on either side. It was early morning, but the sun was already hot, and we were thankful we had remembered to wear straw hats. Monkeys chattered noisily as they swung from branch to branch, and birds pierced the still air with their songs. Above the palms in the distance five conical or bomb-shaped towers of dark full stone rose 200 feet, silhouetted against the sky — the same towers Mouhot had looked on unbelievably.

Four of these towers form a square making the four corners of Angkor Wat, the most famous temple; the fifth and tallest marks the intersection of the North-South and East-West axes or approaches.

The temple and its spacious rectangular grounds are encased by a heavy stone wall on all four sides which is, in turn, guarded by a moat over 1000 feet wide.

Of course we could not comprehend the entire plan from our lowly samlor — for the wall and moat extend two and one-half miles around the periphery of the grounds through the jungle. Here and there the wall has been eaten up by the jungle. As we drove along the moat nearing the west gate, we saw women scrubbing clothes on the old stone steps, men bathing in sarong skirts alongside their water buffalo, and all were equally oblivious to the aged splendor that rose behind them.

At last the samlor came to a halt, and we alighted to go on foot across the causeway paved with huge blocks of stone which spans the moat. There, standing directly on the East-West axis of the temple, the five towers became only three in perfect symmetry. At the end of the causeway is the main gate, and on either side a rambling colonnade gallery replaces the usual stone wall and is reflected in the still waters of the moat.

We walked past two fierce stone lions sitting on their haunches and glowering at misdirected evil spirits that might attempt to cross the moat into the sanctuary. The ballustrade is the body of a snake deity that fans out its many heads at the ends of the ballustrade. Ahead of us in the distance a group of saffron-robed Buddhist priests climbed the steps to enter the first gate.

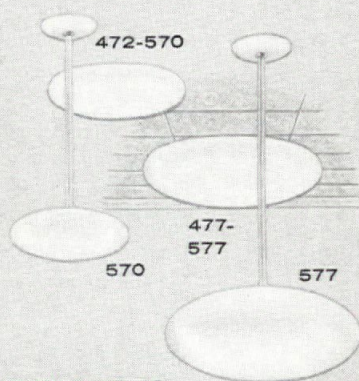
PAST the gate there is yet another causeway equally as long spanning an expanse of dry grass. There are twin chapels, one on either side of the causeway and two rectangular water tanks, one of which was still full of water and overgrown with lotus.

With each step the dark towers rose higher and higher, and disappeared as we walked up the steps and into the damp dark corridors of the inner gate. Extending to either side of us and around the

entire base of the temple was an almost endless gallery, more than half a mile in circumference carved in base-relief. Celestial nymphs sprint gaily with wrists bent back unnaturally, and warriors astride elephants send spears hurling across the walls. A hint of the colors that once enhanced the sculpture is visible. Passing through the inner gate, we emerged in the sunlight again into a sunken stone courtyard, crossed a small bridge and found ourselves at the base of almost vertical steps that lead up and up to the central sanctuary. At the top of these stairs we were in the uppermost courtyard. There were the towers we had seen from a distance. Each cone is encircled with tiered ledges that zigzag in and out at right angles. Around these ledges are the remains of statuettes and symbolic figures. An open lotus blossom crowns each of the five towers. In the center of the courtyard stands the tallest tower, the most sacred spot of the temple, but on closer inspection we discovered that it was inhabited by squeaking bats, and the smell was stifling.

Angkor Wat is the largest, but only one of the many buildings remaining in the jungle city. One cannot see all of Angkor in a day or even several days. The heat forced us to assume a leisurely pace which included afternoon rests within our cool, tile-floored room at the hotel. In the morning, as soon after dawn as we could manage, we took a samlor along the same road, past Angkor Wat to the south gate of the walled city, Angkor Thom. Angkor Thom was one of two successive capital cities located at Angkor. Both cities are vast quadrangles whose areas overlap one another. Angkor Thom was laid out by King Jayavarman VII, the great builder. The city is square and enclosed by a moat and stone wall. Piercing the wall are four gates facing directly North, South, East and West, and a fifth on the east wall as a royal entryway. Roads lead from the four gates to the exact center, dividing the city into quarters. Arising at the intersection of these roads is a

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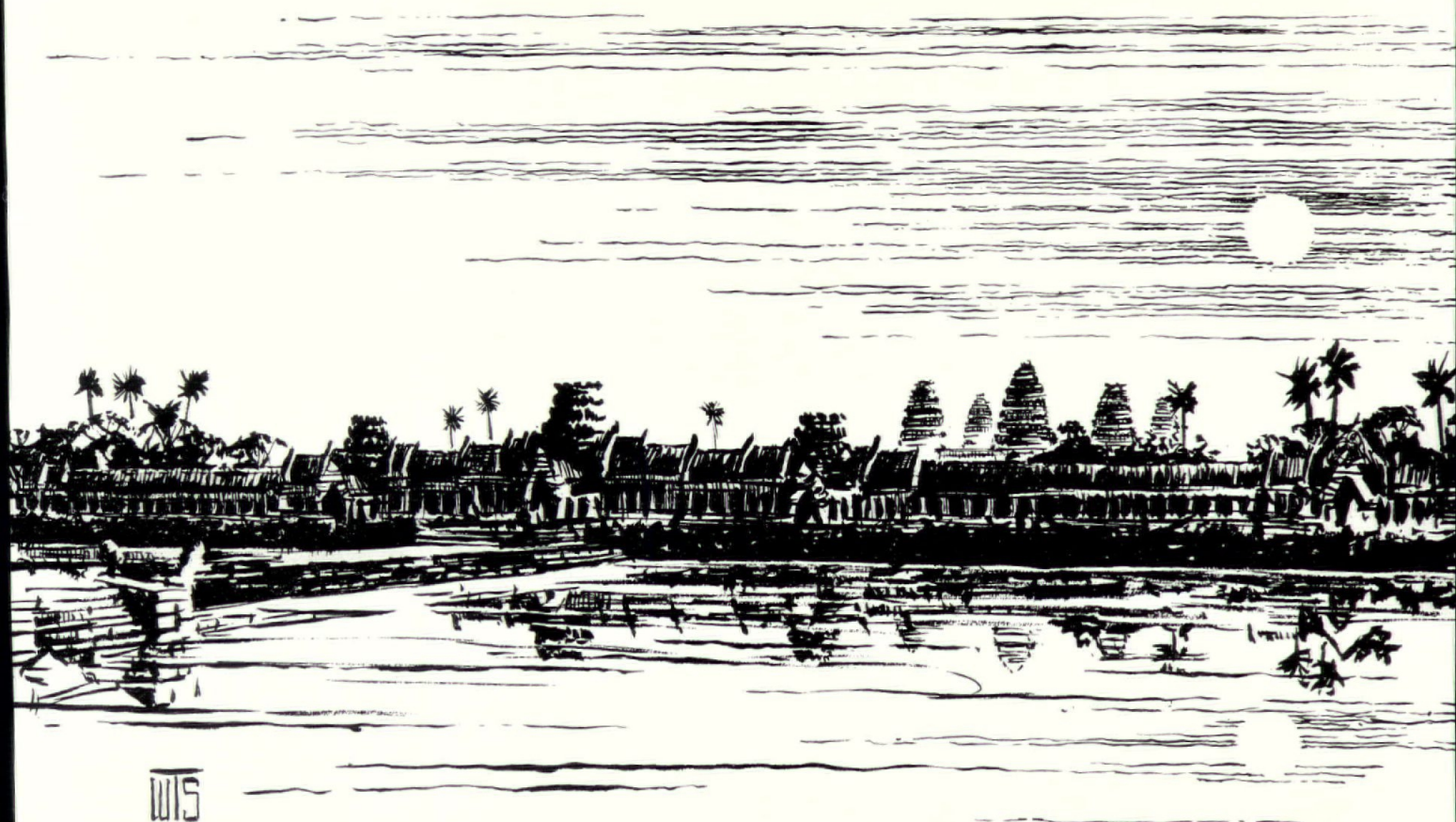
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pyramid temple, the Bayon, which was considered the center of the realm.

THIS, then, was no haphazard city that just grew. It was carefully planned, located and built. All its streets were straight, intersecting at right angles, and the royal buildings were located at a civic center. An inscription has been translated saying, "A king came here with an army of subjects and a limitless host of slaves and he built this capital on a site where no city has stood before." According to Robert Casey in *Four Faces of Siva*, "Angkor Thom in extent and population was the size of Carthage at the time of its fall. It was as large as Rome at the beginning of the Christian era. It had something of

the intellectual status of Athens and the might of Babylon."

We crossed the moat guarding the city wall and touched the snake balustrade on either side and the row of stone men-creatures holding the snake's long body in their arms as though in a tug-of-war. We entered the massive city gate and looked up at the four faces carved on the conical towers, facing in each of the four directions to protect the city from an approaching enemy. Nothing escaped the stare of the slant eyes nor the thick-lipped half smile that spread six feet across the face.

From the city gate the samlor took us along a lonely road that was once a busy avenue to the Bayon — an awesome, even frightening building on the verge of total ruin. It is dominated by many spires marching up the pyramidal sides, each with the same four weird faces we saw on the gateway. The interior is a maze of passageways and steps leading to the various levels and eventually to the top. It is startling to emerge from those dark corridors into the dazzling sun

almost eye to eye with the grimacing faces.

A short distance north of the Bayon we came to a huge clearing. To our left were the remains of the Imperial Palace buildings which are not visible entirely from the road. A flight of stairs lead up to a terrace platform carved with a procession of elephants below the balustrade. On this terrace once stood a council chamber that was renowned for its many mirrors. Standing on the terrace we overlooked the grand parade grounds which we estimated to be equivalent to three city blocks in size.

The jungle steamed and quivered in the midday heat. We sat down in a shady place on the Elephant Terrace to eat our picnic lunch. The samlor boys waited nearby polishing their carriages and joking among themselves. A little jungle boy who had followed us for some time shyly peeped at us from behind a pillar. But above all there was a vast silence. The parade grounds spread before us, empty and silent. How colorful and noisy

(Continued on Page 12)

ADVERTISERS INDEX

Am. Hdwe. Con.	12
Monarch Tile	11
Portland Cement	15
Prescolite Mfg. Co.	6
Trinity White	2
L. R. Ward	13

Houston Chapter Awards Of Merit for Design

Five of the twelve outstanding projects receiving recognition in the annual honor awards competition of the Houston Chapter are presented on these pages. Three honor awards were presented in the July issue.

Award of Merit, Institutional Division,
Houston Chapter AIA, 1960.
St. Joseph's Academy, Brownsville.
Caudill, Rowlett & Scott, Architects.



Award of Merit, Commercial Division,
Houston Chapter AIA, 1960.
Pipeline Technologists, Inc.,
Building, Houston. Neuhaus and
Taylor, Architects.



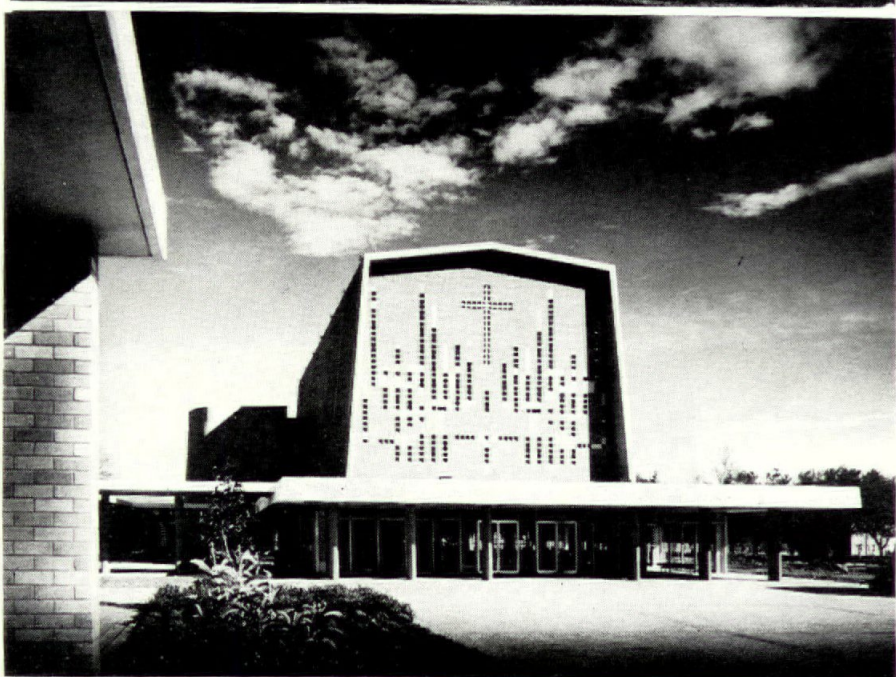
Award of Merit, Small Residence Category,
Houston Chapter AIA, 1960.
Arne G. Engberg Residence, Houston.
Arne G. Engberg, Architect.



Award of Merit, Large Residence Category,
Houston Chapter AIA, 1960.
John B. Carter, Jr., Residence, Houston.
Wilson, Morris, Crain & Anderson, Archi-
tects.



Award of Merit, Institutional Division,
Houston Chapter AIA, 1960.
First Christian Church, Houston.
Brown & McKim, Architects.





Planning for the 1960 TSA Convention in El Paso highlighted the all-day meeting of the Executive Committee in Big Spring on July 11. Counseling on plans were (seated) Harold E. Calhoun, FAIA, TSA vice-president; President Jack Corgan; Reginald Roberts, regional director; and (standing) Olen Puckett of Big Spring; John G. Flowers, Jr., TSA executive director; Arthur Fehr, FAIA, TSA secretary-treasurer; Robert P. Woltz, Jr., TSA past-president; and James Atcheson of Lubbock, TSA vice-president. The planning sessions were followed by a joint meeting of the West Texas and Abilene Chapters.

(Photo by courtesy of the Big Spring Herald.)

Projects of 50's Competition Keen

One hundred and fifty-three outstanding projects built in the decade of the 50's by Texas architects were submitted in the Architecture of Merit In The Past Ten Years judging conducted in Austin, August 13-14.

Every chapter was represented in the review judged by Bradley P. Kidder of Santa Fe, New Mexico, and former AIA director for the Mountain States Region; William B. Wierner of Shreveport, La., and former AIA Awards Committee member; and Truett Coston of Oklahoma City and graduate of the

University of Texas.

Winners and all former AIA award winners will be shown at the Dallas Museum of Fine Arts, October 8th through the 23rd, and at the TSA Convention in El Paso, November 2-5.

Each entry was judged on its own merits, and not in competition with others. The jury selected at least one project from each AIA chapter area and the number of final selections were based strictly on the excellence of the projects submitted. Winners will be published in *The Texas Architect*

CONSTRUCTION REBOUNDING, DODGE SAYS

After a slow start, construction contracts rebounded in the first half of 1960 and by June reached a point not too far below the high levels of last summer, F. W. Dodge Corporation reported this month.

In a midyear review of construction contracts published in the Dodge monthly bulletin, *Building Business*, the Corporation's economists pointed out that non-residential building contracts in the first six months of this year reached the second highest first-half total in history, while heavy engineering contracts dropped slightly below last year and residential contracts were down a sizeable fourteen per cent.

Noting that recent reports indicated that the mortgage market may be loosening up, the report said:

"If there is some second-half gain in housing, and there should be, coupled with the improvement occurring in contracts for non-residential building and heavy engineering, 1960 will wind up as a pretty good year for the construction industry, although it is not likely to be a record-breaker."

Other key developments noted in the review included:

- Contracts for commercial buildings, at \$1,705,000,000, were almost exactly the same as the record total in the first half of 1959. A boom in office building contracts offset a decline in stores and related buildings.
- The largest dollar gain was reported for schools, which rose twelve per cent above the 1959 level to \$1,465,000,000.
- The weakest major sector was residential building, and the weakest part of this sector was one- and two-family houses, down sixteen per cent.
- Contracts for manufacturing buildings were ten per cent above the first half of 1959, and more than forty per cent above the same period of 1958.

CONFUSED beliefs make for confused architecture.

This was the substance of the inspiring remarks of Dr. Edward Frey, Executive Director, Department of Church Building and architecture, United Lutheran Church in America, at the 1960 Texas Conference on Church Building and architecture conducted in June at Fort Worth.

The Texas Society of Architects and the Texas Council of Churches were highly praised for their sponsorship and able assistance in making the conference a reality by the some 450 churchmen and architects who attended.

Clyde R. Hueppelsheuser of the firm of Floore and Hueppelsheuser, Fort Worth, remarked that many who attended "were strong in their belief that this conference would influence Texas Church Architecture more than any endeavor in many years..."

Dr. Frey addressed the assembly the first day on "How Belief Determines Building." He set forth

CHURCH BUILDING PARLEY PRAISED

the principle that people must search themselves to actually know what they believe before they attempt to build an expression of these beliefs.

A highlight of the conference was the talk and slide show presentation of Mr. Robert Durham, of the firm of Durham, Anderson & Freed, Seattle, Washington. Dr. D. L. Landrum, vice-president of the Texas Council of Churches, commented, "Many people probably did not agree with Mr. Durham entirely, but if Mr. Durham returns to Texas ten or twenty-five years from now he will find many of his own footprints in Texas Church Architecture." Mr. Durham explained many

of the principles and philosophies of Contemporary Church Architecture.

The second day of the conference was devoted primarily to the presentation by Dr. Scott T. Ritenour, executive director, Department of Church Building and Architecture, National Council of Churches, New York. He spoke on "The Challenge of Church Building Today." His remarks prompted a realization by his listeners that most of the real challenges in church building today are either being overlooked or ignored. In a complex society with a complex technology, we cannot continue to build as we have always done in the past.

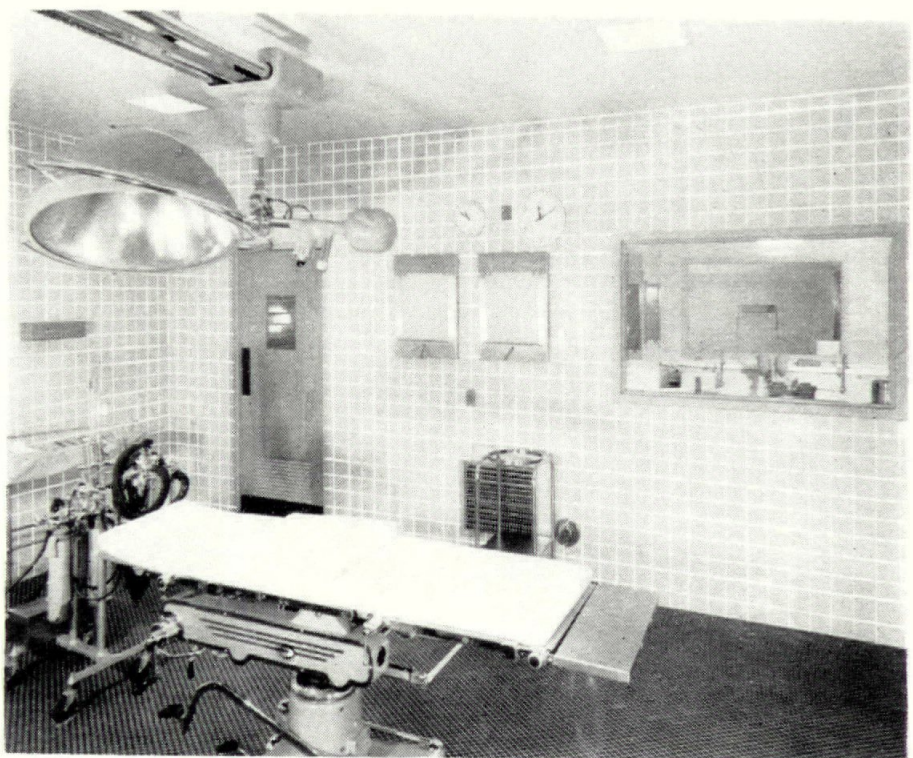


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Towers In The Jungle

(Continued from Page 7)

the now-weedy field must have been during a royal parade! We imagined the music—a clash of cymbals, a deep pound on a massive drum and a lone wandering melody on a primitive flute. In our minds' eyes the field came astir with rippling banners, bejewelled elephants, red parasols and soldiers carrying lances and shields. In golden carriages rode beautiful girls of the palace and the king's wives, white-skinned and delicate with jasmine blossoms wound in their chignons. The king himself, clothed in rich brocade and holding the sacred sword, stood barefooted, proud and expressionless on the back of an elephant whose tusks were encased in gold. All the spectators fell to their knees and touched their foreheads to the ground.

Who were these people, the Khmers? Where did they come from and where did they go? There is a Cambodian legend telling of the origin of the Cambodian civilization which had some historical value. An Indian prince, Kambu, came to Cambodia because his own land of Arya Deca was seized by drought and famine. There in a cave he met the King of the Nagas, the snake gods of the jungle people. A

Naga princess fell in love with him and changed herself into a mortal woman who was, according to the legend, even more beautiful than she had been as a Naga. Kambu married the princess, and they settled in the valley of the Mekong River to make a new kingdom.

Perhaps Kambu represents a group of Indian colonists who fled their drought-ridden land, established themselves in Cambodia and became the masters of the aborigines and the originators of Indian culture in the fertile valley of the Mekong. Certainly the architecture and images of the gods reflect an Indian influence. And, too, wall inscriptions are written in an alphabet similar to the one formerly used in southern India and derived from the Sanskrit.

There are many variations on the theme as to where the colonists came from and when. Monsieu George Groslier, known for his work as curator of the Albert Sarraut Museum in Phnom Penh, capital of Cambodia, maintained that aborigines developed the civilization years before the Indian invasion.

As to the fate of the Khmers we can only guess. Why were Angkor and other cities of the realm deserted and the culture left dead? There is evidence that the temples and shrines were looted which might mean conquest in warfare. Perhaps the Khmer civilization had become so soft that they were an easy target for the Thais or Chams. It could be, too, that there was an inner revolt of the slave class who murdered the nobility and intelligentsia and then lapsed back into their primitive existence and forgot their brilliant culture.

ONE thing is quite evident though—that the jungle enveloped the city once man no longer had the will to fight it back. In one temple, Ta Prohm, we saw huge trees growing from the tops of roofs and walls. Those white-trunked fromager trees tower some two hundred feet in the air. At the base they fan out and send their snake-like roots, sometimes two feet

in diameter, clambering all over the structure, up and down, pushing over walls and toppling doorways. Some of the buildings are in total ruin, mounds of earth and stone, but many have been pieced together by archeologists. Of course, the many private dwellings of wood and thatch have long since disappeared.

There was a Chinese traveler, Chou Ta-kuan, an ambassador from the Emperor of China, who lived in Angkor during its period of glory in the thirteenth century. He tells of towers of copper and gold; and bronze statues of a horse, elephant and bull, and a reclining bronze Buddha whose navel gave forth a fountain of water. "In fact it lacks nothing that could make it delightful." Probably the dull temple stones that we saw were once covered with golf leaf and bright colors as the temples of Bangkok are today.

The records of Chou-Ta-kuan give us the only glimpse of a living Angkor, of the people who walked its streets, lived in the long-demolished houses and lit the temple fires. The Khmers were very "careful of their persons," according to the Chinese traveler, and annointed their bodies with "ointments scented with santal and musk." The wealthier families had many servants, a hundred or more, who were bought as savages and trained. The king had one private wife who lived in quarters adjoining his own apartments and four others, one for each point of the compass. He gave two audiences a day in the council hall. All those who came to the audience sat on the floor and waited for the king. Then music of seashell trumpets was heard from inside the palace, and the king appeared at the gold framed window, sacred sword in hand. All the people clasped their hands together and touched their foreheads to the floor.

But now they are all dead and Angkor is quiet. It is empty save the monkeys, bats and jungle people who spasmodically inhabit a nook and cranny. An even the white-skinned visitors feel compelled to be silent and listen.



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DESIGNING

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WHEN an architect designs a building with fire protection in mind, he ought to think beyond defense. Defense never defeated an enemy. And fire is the potential enemy of every building.

Much modern architectural thinking concerns itself with the use of fire-resistive construction materials. This has been a step in the right direction. It is universally agreed that it has helped to reduce loss of life and property from fire.

But the use of fire-resistive materials is only one factor in the total architectural scheme against fire. The reason is simple. There are no "fire-proof" materials. At 550 deg. F. steel begins to lose strength; at 2606 deg. F., it melts. Aluminum melts at 1218 deg. F., glass blocks at 2377 deg. F. Enough heat and enough time will destroy any building and jeopardize the lives of its occupants.

An endless procession of large fires each year reduce fireproof buildings to twisted tangles of stone and steel. So widespread has been the misconception that fireproof buildings won't burn that the National Board of Fire Underwriters prepared a special pamphlet in 1955 with this warning. "The term fireproof building properly defined has never meant a building which could not be damaged by fire. A fireproof building is a building of which the structural members, including walls, columns, floors and roof constructions, are of noncombustible materials of such quality and so assembled as to resist the effects of a severe fire."

Fire-resistive materials only ex-

tend the period of time it takes to destroy a building by fire, giving the building's occupants a warning and firemen a time edge that they would not have in combustible construction.

But that time edge has often been inadequate. Some of the worst disasters occur in fireproof buildings. The biggest fire disaster in our nation's history occurred in the General Motors hydramatic transmission plant at Livonia, Mich., in 1953 and 119 people died in the fireproof modern Winecoff Hotel 12 years ago.

The best way to handle fire is to extinguish it, not to confine it or to retard its spread. That's where automatic sprinklers come into the picture.

An automatic sprinkler is a system of pipes, hidden or exposed, containing water under pressure. At regularly spaced intervals, sprinkler heads stand watch over every possible spot where a fire can begin.

They place a spray of water only where the fire begins and only in the amounts and the areas needed. As extinguishment takes place, an alarm warns occupants to evacuate the building. A central alarm electrical connection can be installed as a part of the sprinkler system to notify the fire department of the sprinkler operation at once.

During the most recent 30-year period surveyed by the National Protection Association, sprinklers worked to extinguish or immediately bring under control 92.6 percent of the 59,000 fires reported to them by fire departments and insurance carriers.

Figures available on fire loss in sprinklered manufacturing and mercantile properties of the better class show a loss of 2 to 3 cents on \$100 of property value. It is a fair estimate that the fire loss on those same properties without sprinklers would have been 10 to 20 times as great, the association says.

Because of the impressive performance record of building protection by sprinklers, fire insurance companies usually grant insurance premium rate reductions ranging from 50 to 90 percent.

The ultimate aim of designing a building for fire protection can best be achieved by combining the best defensive and offensive tools. For defense, slow burning materials; for offense, automatic extinguishment at the fire's source. That means automatic sprinklers belong in the specifications of a building as much as a heating plant or a plumbing system. The very existence of a building and the lives of its occupants may depend on a decision to install sprinklers.



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Texas Architectural Foundation

A dignified and thoughtful way to remember a departed friend is to make a donation to the memorial funds of the Texas Architectural Foundation. Chapters, firms and individuals increasingly are taking advantage of this method of demonstrating high regard through a constructive and meaningful expression.

All donations are acknowledged by the officers of the Foundation to the donor and the family or associates of the person memorialized. The application of the gift to further architectural education in Texas is explained.

Next time, send a check to: Texas Architectural Foundation, 327 Perry-Brooks Bldg., Austin.

New Engineering Laboratory Opens

A NEW \$1,400,000, five-story Engineering Laboratories Building with facilities for teaching and research in the newest fields of space-age engineering opens at the University of Texas this fall.

The air-conditioned building will be fully equipped for teaching and research in aero-space engineering, electronics, sanitary engineering, metallurgy and materials science.

About one-fifth of the laboratory space is allocated for materials science — the newest engineering field that combines science and engineering to work with space-age materials like ceramics for missile nose cones or new metals for transistors or other electronic equipment.

The new building, with 40,000 square feet of usable space, provides better-planned classrooms and laboratories and will enable the five engineering departments partially to vacate "scattered, inadequate quarters," Dr. M. J. Thompson, Aero-Space Engineering Department chairman and engineering building committee chairman, said.

The building contains 30 teaching and research laboratories, a lec-

August is to Augustus as July is to Ceasar

SCHOOL-AGE boys and girls probably are beginning to wonder "where the summer went" as time nears for class roll calls again. We can't answer that. But, for those looking at the past or hoping into the future, *Tnemec Topics* comes up with derivations of the names of those months in which we scarcely find time to get things done — summer or winter.

January was named for Janus, the Roman god who had two faces; one looking into the past and the other into the future.

February comes from the Latin word *Februo*, to purify. It was the time of the year for Roman ceremonies of purification.

March was named for Mars, Ro-

ture hall with 144-seating capacity, graduate seminar rooms, five design rooms equipped with projection equipment so they can double as lecture halls, a 100-person capacity faculty conference room, and photographic darkrooms adjacent to metallurgical and ceramics laboratories.

"The current tendency toward interrelationship between engineering fields is represented in the Stress Analysis and the Materials and Processes Laboratories to be used by Aero-Space, Engineering Mechanics and Civil Engineering," Dr. Thompson said. "The Stress Analysis Lab has a 45-foot drop deep well which engineers will use to study the effect of drop impact on materials and equipment."

The Civil Engineering Department's sanitary engineering section features laboratories that contain microbiological, chemical and radiochemical equipment for teaching courses on water treatment and pollution control.

man god of war, and in the time of Romulus it was the first month in the year. In this day there were only ten months in the calendar. These were of uneven lengths, some having less than twenty days and some containing as many as thirty-five days. When Numa became King, which was about 700 years before Christ, he decided that there should be 12 months and added two — January and February — and placed them at the beginning of the calendar; and in that way March became the third month. Among the old Saxons this month was known as *Lenct*, meaning spring, and this is the origin of our word *Lent*.

April is from the Latin word *Aperio*, to open; it is at this season that the flowers and leaves begin to bloom. The Saxons called the month *Easter Month*, in honor of Easter, the goddess of spring.

May was named for *Maia*, daughter of the Roman deity *Atlas*.

June was named for the goddess *Juno*.

July for a long time was known by its old name of *Quintilis*, from the Latin meaning five, as it was the fifth month in the ancient calendar of Romulus; but its name was changed to July in honor of Julius Caesar.

August, too, retained its old name of *Sextilis* (the sixth month) until the time of Augustus, who changed it to August.

September is from the Latin *septem*, seven; originally the seventh month, it had been the ninth for two thousand years.

October, November and December also retain the names by which they were known when there were but ten months in the year, being derived from the Latin words *Octo*, *Novem*, and *Decem* — eight, nine, and ten.

WHEN AMERICA BUILDS FOR ECONOMY . . . IT BUILDS WITH CONCRETE



Sears, Roebuck & Company's Tampa store . . .

concrete folded plate roof achieves large, unobstructed floor area

One of the basic requirements here was to achieve unobstructed floor space with economy. Architects Weed, Russell, Johnson & Associates found the answer by using a concrete shell in the form of a folded plate. This construction made it possible to span the entire floor area with only one interior row of columns . . . and suspend the second floor from the roof. The result: 163,715 square feet of *fully flexible* floor space, so important to any retail selling operation.

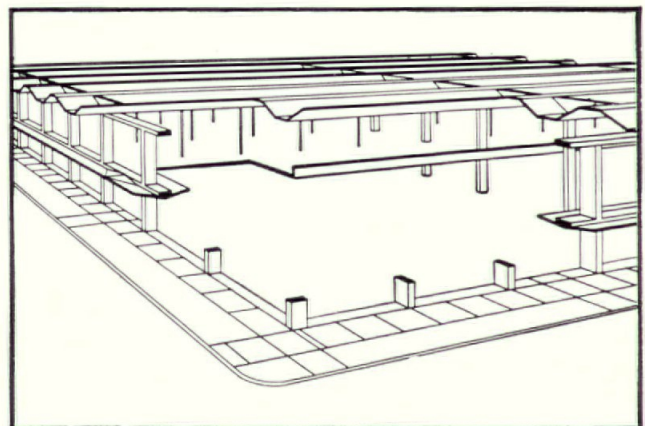
Folded plate design is, in itself, unique and interesting. And only concrete can give the added boldness of the wide, cantilevered overhang.

It's one more example of the way new uses of concrete are bringing big economies and added vitality to both conventional and modern architecture.

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Isometric view showing 125-foot c on c spacing of main columns. Floor slab is supported by 3-inch plates welded together to form a hanger. Hangers are spaced 25 feet c on c.

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Everywhere...

- TSA and the City of El Paso welcome you to spend four (or more) days in the sunshine playground of the Mexican border for the 21st annual TSA convention, November 2, 3, 4 and 5.
- The El Paso Chapter, AIA, will be host and members are working and planning with TSA officers and staff to develop the theme "**Architecture For The Americas**" into an informative and stimulating program.
- Start the new decade — the "Sensible Sixties" — the sensible way. Plan right now to attend — and enjoy — the 1960 TSA convention.

Headquarters for the 1960 TSA convention will be the Hotel Cortez in unusual El Paso's downtown area. Juarez and Old Mexico, just across the Rio Grande, are but a few minutes away, yet as far removed in customs, language and atmosphere as though half around the globe. All sorts of opportunities exist for fun and a delightful convention.

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